especially as many of the species enumerated are simply saprophytic forms, whose presence can do no injury. The enumeration of such species is, from a scientific standpoint, of great value; but they are altogether out of place in a work which should place before practical men the outcome of scientific research in language divested of scientific technicalities. The author considers it essential that each fungus should possess a popular name in addition to its scientific one, and there is some justification for this idea, especially when such names are of local origin, and express a definite idea, as "collar-rot," "wither-top," &c., but it is more than doubtful whether the English rendering of the scientific name, as "West Australian Septoria," or "Glœosporium-like Colletotrichum," will be adopted by the fruit grower. Fifty-one species of fungi found on citrus trees are described as new to science; this is a somewhat daring piece of work in the comparative absence of literature and herbaria. It must be borne in mind that the fact of a fungus not agreeing with any species recorded in Saccardo's "Sylloge Fungorum" by no means justifies an author in describing it as new to science.

In defining parasites and saprophytes respectively, the author states that it is not always easy to decide between the two, and the crucial test, by means of pure cultures, is not alluded to. This, however, may not be due to lack of knowledge or desire on the part of the author, who, as vegetable pathologist, is probably expected to cover too much ground; hence fundamentals, which consume time, are apt to be neglected in favour of less exact methods, which may meet with approval for the time being.

The twelve coloured plates illustrating the most pronounced and destructive forms of disease attacking lemons and oranges are excellent in every respect, and should prove of great service in enabling planters to recognise at an early stage the appearance of a disease which, if neglected, might prove disastrous. The most approved methods of treating the various diseases are given in tabular form.

Missouri Botanical Garden. Eleventh Annual Report. Pp. 144; 58 plates. (St. Louis, Missouri, 1900.)

THIS volume is almost entirely made up of four scientific papers representing work carried out in connection with the Missouri Botanical Garden. The papers are: a disease of *Taxodium distichum* known as "peckiness," also a similar disease of *Libocedrus decurrens* known as pin-rot, by Dr. H. von Schrenk; Agaves flowering in the Washington Botanic Garden in 1898, by Mr. J. N. Rose; A Revision of the American species of Euphorbia of the section Tithymalus occurring north of Mexico, by Mr. J. B. S. Norton; and a Revision of the species of Lophotocarpus of the United States, and a description of a new species of Sagittaria, by Mr. J. G. Smith. Dr. von Schrenk's paper has already been noticed (vol. lxi. p. 452).

Mr. Trelease, the director of the Garden, shows by these papers and his report that valuable work is being done. A small synoptical collection representative of the principal natural orders of flowering plants has been installed in the central part of the Garden, where it is proposed to continue it as a convenient means of enabling teachers in elementary schools to demonstrate to their pupils the characters of the larger plant groups. The total number of species and varieties now cultivated in the Garden is nearly ten thousand.

Mr. Trelease devoted a couple of months last summer to the study of the botany of the Alaskan coast region and the islands of Bering Sea, as a member of the Harriman Alaska Expedition. The scientific results of his work will, no doubt, be published after the large amount of material collected has been subjected to critical study.

LETTERS TO THE EDITOR.

[*The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of* NATURE. *No notice is taken of anonymous communications.*]

Atmospheric Electricity and Dew-ponds.

IT is not my intention to enter into controversy with such authorities as Mr. Aitken or Mr. Wilson. I wish only to describe certain phenomena which have come under my notice, in the hope that I may help to throw some light on a subject of great importance, theoretical as well as practical.

On the chalk hills in the south-east of England there are a number of ponds known as dew-ponds. One of these was described by Gilbert White ("Natural History of Selborne," Letter 29). There is a pond of considerable size at one of the highest points of the main ridge of the South Downs close to Chanctonbury Ring. From its position it is obvious that this pond can only be fed by water precipitated into it directly from the air. Yet it always contains a considerable volume of water. At the end of the dry weather last year, when most of the ponds in the valleys were empty, this dew-pond still contained several thousand gallons. How does this pond obtain the enormous quantities of water necessary to compensate for the rapid evaporation in such an exposed position, and also to supply large flocks of sheep?

It appeared to me that there was but one possible explanation: a difference of electrical potential must cause an attraction between the particles of moisture and the summit of the hill upon which the pond is situated. It is, of course, well known that drops of rain, &c., usually have an electrical charge, but it was necessary to ascertain whether this was capable of producing such a great effect In order to test this point I took two porcelain basins of equal size and suspended them by means of silk threads from stakes driven into the ground at a high part of the ridge of the South Downs. In each of these basins was fixed an upright piece of sheet-copper. The two pieces of apparatus were placed in exactly similar positions and were in every respect identical, except that in the one case the copper screen was connected to earth by means of a wire, whereas in the other case it was insulated by the silk threads.

The apparatus was left thus during the night of April 1, 1899. There was a thick mist on the hills, so much so that I was unable to select the most favourable position for the apparatus. In the morning the amount of water in the two basins was measured. In the basin with the insulated screen there were 15·5 c.c. of water; in that with the screen connected to earth there were 18·0 c.c. This clearly confirmed my theory, for the insulated apparatus would tend to acquire an electrical charge from the particles of moisture. Consequently the attraction would be less than in the case of the apparatus which was not insulated. The insulation must have been very imperfect, for the silk became saturated with moisture as soon as the apparatus was erected. The position chosen, also, was not so favourable as it might have been. Nevertheless there was a difference of 16 per cent. in the quantities of moisture collected.

I intended to repeat and extend the experiment, but I have been unable to find an opportunity. I hope that this letter will call attention to a matter of considerable interest.

ARTHUR MARSHALL.

Chemical Department, Woolwich Arsenal, September 10.

Huxley and his Work.

MR. HENKEL'S quotation from "One Hundred and One Great Writers" (NATURE, September 6) reminds one that the taunt of being a populariser was familiar enough to Huxley himself. It recalls also the little side-thrusts with which in return the detractors were sometimes honoured. In the preface to vol. viii. of the "Collected Essays," for instance, Huxley remarks:—

"The popularisation of science has its drawbacks. Success in this department has its perils for those who succeed. The people who fail take their revenge, as we have recently had occasion to observe, by ignoring all the rest of a man's work and glibly labelling him a mere populariser."